YEAR 4 MATHS PROGRESSION IN SKILLS (N.C. COVERAGE) AND KNOWLEDGE STATUTORY REQUIREMENTS

AUTUMN	SPRING	SUMMER
AUTUMN 1: ***NUMBER – NUMBER AND PLACE VALUE*** ➢ *count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number* ➢ *count in multiples of 6, 7, 9, 25 and 1000* ➢ *find 1000 more or less than a given number* ➢ *recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)* ➢ *identify, represent and estimate numbers using different representations* ➢ *count in multiples of 6, 7, 9, 25 and 1000* ➢ *recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)* ➢ *order and compare numbers beyond 1000* ➢ *identify, represent and estimate numbers using different representations* ➢ *round any number to the nearest 10, 100 or 1000* ➢ ***NUMBER – ADDITION AND SUBTRACTION*** ➢ solve number and practical problems that involve all of the above and with increasingly large positive numbers ➢ add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate ➢ estimate and use inverse operations to check answers to a calculation	**SPRING TERM:** ***NUMBER – MULTIPLICATION AND DIVISION*** ➢ recall multiplication and division facts for multiplication tables up to 12 × 12 ➢ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers ➢ recognise and use factor pairs and commutativity in mental calculations ➢ multiply two-digit and three-digit numbers by a one-digit number using formal written layout ➢ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects ***MEASURE – LENGTH AND PERIMETER*** ➢ Convert between different units of measure [for example, kilometre to metre; hour to minute] ➢ Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres ***NUMBER – FRACTIONS*** ➢ recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators ➢ recognise and show, using diagrams, equivalent fractions with small denominators	**SUMMER TERM:** ***NUMBER - DECIMALS*** ➢ Recognise and write decimal equivalents of any number of tenths or hundredths ➢ Compare numbers with the same number of decimal places up to two decimal places ➢ Round decimals with one decimal place to the nearest whole number ➢ Recognise and write decimal equivalents to 1/ 4, 1 /2, 3 /4 ***MEASURE - MONEY*** ➢ Estimate, compare and calculate different measures, including money in pounds and pence ***MEASURE - TIME*** ➢ *convert between different units of measure [for example, kilometre to metre; hour to minute* ***GEOMETRY – PROPERTIES OF SHAPE*** ➢ Identify acute and obtuse angles and compare and order angles up to two right angles by size ➢ Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes

YEAR 4 MATHS PROGRESSION IN SKILLS (N.C. COVERAGE) AND KNOWLEDGE STATUTORY REQUIREMENTS

- solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why

MEASURE - AREA

- Find the area of rectilinear shapes by counting squares
- estimate, compare and calculate different measures, including money in pounds and pence

NUMBER – MULTIPLICATION AND DIVISION

- Recall multiplication and division facts for multiplication tables up to 12 × 12
- Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers

- compare and order unit fractions, and fractions with the same denominators
- recognise and show, using diagrams, families of common equivalent fractions
- solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number
- add and subtract fractions with the same denominator

NUMBER – DECIMALS

- Recognise and write decimal equivalents of any number of tenths or hundredths
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths

- Identify lines of symmetry in 2D shapes presented in different orientations
- Complete a simple symmetric figure with respect to a specific line of symmetry

STATISTICS

- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
- solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

GEOMETRY – POSITION AND DIRECTION

- Describe positions on a 2D grid as coordinates in the first quadrant
- Plot specified points and draw sides to complete a given polygon
- Describe movements between positions as translations of a given unit to the left/right and up/down

YEAR 4 MATHS PROGRESSION IN SKILLS (N.C. COVERAGE) AND KNOWLEDGE STATUTORY REQUIREMENTS

Year 4 Maths Skills

Addition and Subtraction	Number and Place Value	Fractions (including decimals and %)	Algebra	Measurement	Geometry: Properties of shapes	Statistics
WRITTEN METHODS add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate **INVERSE OPERATIONS, ESTIMATING AND CHECKING ANSWERS** estimate and use inverse operations to check answers to a calculation **PROBLEM SOLVING** solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why	**COUNTING** -count backwards through zero to include negative numbers -count in multiples of 6, 7, 9, 25 and 1000 -find 1000 more or less than a given number **COMPARING NUMBERS** -order and compare numbers beyond 1000 compare numbers with the same number of decimal places up to two decimal places *(copied from Fractions)* **IDENTIFYING, REPRESENTING AND ESTIMATING NUMBERS** -identify, represent and estimate numbers using different representations **READING AND WRITING NUMBERS** (Including Roman Numerals)	**COUNTING IN FRACTIONAL STEPS** count up and down in hundredths **RECOGNISING FRACTIONS** recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten **COMPARING DECIMALS** compare numbers with the same number of decimal places up to two decimal places **ROUNDING INCLUDING DECIMALS** round decimals with one decimal place to the nearest whole number **EQUIVALENCE** -recognise and show, using diagrams, families of common equivalent fractions	**FORMULAE** Perimeter can be expressed algebraically as 2(a + b) where a and b are the dimensions in the same unit. *(Copied from NSG measurement)*	**COMPARING AND ESTIMATING** estimate, compare and calculate different measures, including money in pounds and pence *(also included in Measuring)* **MEASURING and CALCULATING** estimate, compare and calculate different measures, including money in pounds and pence *(appears also in Comparing)* -measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres - Find the area of rectilinear shapes by counting squares **TELLING THE TIME**	**IDENTIFYING SHAPES AND THIER PROPERTIES** identify lines of symmetry in 2-D shapes presented in different orientations **DRAWING AND CONSTRUCTING** complete a simple symmetric figure with respect to a specific line of symmetry **ANGLES** identify acute and obtuse angles and compare and order angles up to two right angles by size **Geometry: Position and Direction** **POSITION, DIRECTION AND MOVEMENT** -describe positions on a 2-D grid as	**INTERPRETING, CONSTRUCTING AND PRESENTING DATA** interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs **SOLVING PROBLEMS** solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.

	-read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. **UNDERSTANDING PLACE VALUE** -recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) -find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths *(copied from Fractions)* **ROUNDING** -round any number to the nearest 10, 100 or 1000 -round decimals with one decimal place to the nearest whole number *(copied from Fractions)* **PROBLEM SOLVING** - solve number and practical problems that involve all of the above and with increasingly large positive numbers	- recognise and write decimal equivalents of any number of tenths or hundredths - recognise and write decimal equivalents to 1/4; 1/2; ¾ **ADDITION AND SUBTRACTION OF FRACTIONS** add and subtract fractions with the same denominator **MULTIPLICATION AND DIVISION OF DECIMALS** find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths **PROBLEM SOLVING** -solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number -solve simple measure and money problems involving		-read, write and convert time between analogue and digital 12 and 24-hour clocks *(appears also in Converting)* - solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days *(appears also in Converting)* **CONVERTING** - convert between different units of measure (e.g. kilometre to metre; hour to minute) - read, write and convert time between analogue and digital 12 and 24-hour clocks *(appears also in Converting)* -solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days *(appears also in Telling the Time)*	coordinates in the first quadrant - describe movements between positions as translations of a given unit to the left/right and up/down -plot specified points and draw sides to complete a given polygon	

		fractions and decimals to two decimal places.				